IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 2-12 in accordance with the following:

1. (Previously Presented) A method of controlling an identification level for an optical receiver wherein the optical receiver converts an optical signal from an optical fiber into an electric signal, uses a limiter amplifier to amplify the electric signal, and reproduces data, the method comprising:

changing an identification level supplied to the limiter amplifier between a lower bound and an upper bound thereof and storing a respective average of an output of the limiter amplifier corresponding to each identification level together with the identification level;

setting a first average between a minimal value of the respective averages and a predefined value and a second average between a maximal value of the respective averages and the predefined value, said predefined value being between the minimal value and the maximal value, and obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average; and

computing an optimal identification level based on the first identification level and the second identification level and supplying the optimal identification level to the limiter amplifier.

2. (CURRENTLY AMENDED) The method as claimed in claim 1, wherein the first average and the second average are substantially equal to ~~0.25(Min + Max)~~Min +0.25(Max-Min) and ~~0.75(Min + Max)~~Min +0.75(Max-Min), wherein the minimal value and the maximum value are represented by Min and Max, respectively.

3. (CURRENTLY AMENDED) The method as claimed in claim 1, wherein the optimal identification level is set between ~~0.3(Id1 + Id2)~~(Id1 + 0.3(Id2-Id1)) and ~~0.4(Id1 + Id2)~~(Id1 + 0.4(Id2-Id1)), wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively.

4. (CURRENTLY AMENDED) A method of controlling an identification level for an optical receiver wherein the optical receiver converts an optical signal from an optical fiber into an electric signal, uses a limiter amplifier to amplify the electric signal, and reproduces data, the method comprising:

changing an identification level supplied to a monitoring limiter amplifier between a lower bound and an upper bound thereof~~, said monitoring limiter amplifier configured similarly to the limiter amplifier and receiving the electric signal,~~ and storing a respective average of an output of the monitoring limiter amplifier corresponding to each identification level together with the identification level;

setting a first average between a minimal value of the respective averages and a predefined value and a second average between a maximal value of the respective averages and the predefined value, said predefined value being between the minimal value and the maximal value, and obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average; and

computing an optimal identification level based on the first identification level and the second identification level and supplying the optimal identification level to the limiter amplifier.

5. (CURRENTLY AMENDED) The method as claimed in claim 4, wherein the first average and the second average are substantially equal to Min +0.25(Max-Min) and Min +0.75(Max-Min)~~0.25(Min + Max) and 0.75(Min + Max)~~, wherein the minimal value and the maximum value are represented by Min and Max, respectively.

6. (CURRENTLY AMENDED) The method as claimed in claim 4, wherein the optimal identification level is set between (Id1 + 0.3(Id2-Id1)) and (Id1 + 0.4(Id2-Id1))~~0.3(Id1 + Id2) and 0.4(Id1 + Id2)~~, wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively.

7. (CURRENTLY AMENDED) An optical receiver for converting an optical signal from an optical fiber into an electric signal, using a limiter amplifier to amplify the electric signal, and reproducing data, comprising:

a change part changing an identification level supplied to the limiter amplifier between a lower bound and an upper bound thereof;

a storage part storing a respective average of an output of the limiter amplifier

corresponding to each identification level together with the identification level; and

a computation part setting a first average ~~as~~ between a minimal value of the respective averages and a predefined value and a second average between a maximal value of the respective averages and the predefined value, said predefined value being between the minimal value and the maximal value, obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average, computing an optimal identification level based on the first identification level and the second identification level, and supplying the optimal identification level to the limiter amplifier.

8. (CURRENTLY AMENDED) The optical receiver as claimed in claim 7, wherein the first average and the second average are substantially equal to Min +0.25(Max-Min) and Min +0.75(Max-Min)~~0.25(Min + Max) and 0.75(Min + Max)~~, wherein the minimal value and the maximum value are represented by Min and Max, respectively.

9. (CURRENTLY AMENDED) The optical receiver as claimed in claim 7, wherein the optimal identification level is set between (Id1 + 0.3(Id2-Id1)) and (Id1 + 0.4(Id2-Id1))~~0.3(Id1 + Id2) and 0.4(Id1 + Id2)~~, wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively.

10. (CURRENTLY AMENDED) An optical receiver for converting an optical signal from an optical fiber into an electric signal, using a limiter amplifier to amplify the electric signal, and reproducing data, comprising:

~~a monitoring limiter amplifier configured similarly to the limiter amplifier and receiving the electric signal~~;

a change part changing an identification level supplied to ~~the~~ a monitoring limiter amplifier between a lower bound and an upper bound thereof;

a storage part storing a respective average of an output of the monitoring limiter amplifier corresponding to each identification level together with the identification level; and

a computation part setting a first average between a minimal value of the respective averages and a predefined value and a second average between a maximal value of the respective averages and the predefined value, said predefined value being between the minimal value and the maximal value, obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average, computing an optimal identification level based on the first identification level and the second identification

level, and supplying the optimal identification level to the limiter amplifier.

11. (CURRENTLY AMENDED) The optical receiver as claimed in claim 10, wherein the first average and the second average are substantially equal to Min +0.25(Max-Min) and Min +0.75(Max-Min)~~0.25(Min + Max) and 0.75(Min + Max)~~, wherein the minimal value and the maximum value are represented by Min and Max, respectively.

12. (CURRENTLY AMENDED) The optical receiver as claimed in claim 10, wherein the optimal identification level is set between (Id1 + 0.3(Id2-Id1)) and (Id1 + 0.4(Id2-Id1))~~0.3(Id1 + Id2) and 0.4(Id1 + Id2)~~, wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively.